

What is claimed is:

1. A method for reducing acute inflammation in a warm-blooded vertebrate suffering from such inflammation, said method comprising the steps of 5 administering orally or parenterally to said vertebrate about 0.1 to about 10,000 IU of IFN-gamma/kg of body weight of said vertebrate and reducing said acute inflammation.
2. The method of claim 1 wherein the IFN-gamma is administered buccally or sublingually in a solution or in a solid saliva-soluble dosage form.
- 10 3. The method of claim 1 wherein the vertebrate is a human patient suffering from an inflammation induced by radiation of the lungs, brain or kidney during radiation therapy for tumors.
4. The method of claim 1 wherein the acute inflammation is the result of reperfusion injury incident to stroke or coronary artery blockage.
- 15 5. The method of claim 1 wherein the warm-blooded vertebrate is a human patient suffering from a traumatic injury to the brain or spinal cord.
6. The method of claim 1 wherein the acute inflammation is the result of traumatic burns in a human patient.
7. The method of claim 1 wherein the acute inflammation is asthma.
- 20 8. The method of claim 1 wherein the interferon-gamma is administered at about 1 to about 500 IU of interferon-gamma/kg of body weight of said vertebrate.
9. The method of claim 1 wherein the interferon-gamma is administered at about 1 to about 100 IU of interferon-gamma/kg of body weight of said vertebrate.
10. A method for treating or preventing IFN-gamma sensitive disease 25 states selected from the group consisting of diseases characterized by monocyte and neutrophil dysfunction, cancer and fibrosis in a human patient suffering from such disease, said method comprising the steps of administering orally or parenterally to said patient about 0.1 to about 10,000 IU of IFN-gamma/kg of body weight of said vertebrate, and treating or preventing said disease states.
- 30 11. The method of claim 10 wherein the disease state is selected from the group consisting of chronic granulomatosis disease and osteopetrosis.

12. The method of claim 10 wherein the disease state is fibrosis of any organ.

13. The method of claim 10 wherein the interferon-gamma is administered at about 1 to about 500 IU of interferon-gamma/kg of body weight of said vertebrate.

5 14. The method of claim 10 wherein the interferon-gamma is administered at about 1 to about 100 IU of interferon-gamma/kg of body weight of said vertebrate.

10 15. A method for treating or preventing bacterial or fungal disease in a warm-blooded vertebrate susceptible to said diseases comprising the steps of administering orally or parenterally to said vertebrate about 0.1 to about 10,000 IU of IFN-gamma/kg of body weight of said vertebrate and treating or preventing said bacterial or fungal disease.

16. The method of claim 15 wherein the IFN-gamma is administered into the oral cavity.

15 17. The method of claim 16 wherein the IFN-gamma is administered sublingually or buccally.

18. The method of claim 15 wherein the IFN-gamma is administered in a liquid dosage form.

19. The method of claim 15 wherein the IFN-gamma is administered in a solid dosage form.

20 20. The method of claim 19 wherein the solid dosage form is saliva-soluble and prepared for dissolution in saliva in the mouth.

21. The method of claim 15 wherein the interferon-gamma is administered at about 0.1 to about 5000 IU of interferon-gamma/kg of body weight of said vertebrate.

25 22. The method of claim 15 wherein the interferon-gamma is administered at about 1 to about 500 IU of interferon-gamma/kg of body weight of said vertebrate.

23. The method of claim 15 wherein the interferon-gamma is administered at about 1 to about 100 IU of interferon-gamma/kg of body weight of said vertebrate.

30 24. A pharmaceutical formulation for treatment of a disease selected from the group consisting of acute inflammation, monocyte, neutrophil, or B cell dysfunction, cancer, bacterial and fungal diseases, and fibrosis, said formulation

comprising in unit dosage form about 10 to about 50,000 IU of human IFN-gamma and a pharmaceutically acceptable carrier therefor.

25. The pharmaceutical formulation of claim 24 in liquid form.
26. The pharmaceutical formulation of claim 24 in solid form.
- 5 27. The pharmaceutical formulation of claim 24 wherein the pharmaceutical acceptable carrier comprises a saliva-soluble solid and the formulation is in lozenge dosage form.
28. A pharmaceutical formulation for treatment of a disease selected from the group consisting of acute inflammation, monocyte, neutrophil, or B cell 10 dysfunction, cancer, bacterial and fungal diseases, and fibrosis, said formulation comprising in unit dosage form about 10 to about 50,000 IU of human IFN-gamma, a therapeutic agent selected from the group consisting of an antibiotic, an antifungal, an antifibrotic, and a chemotherapeutic agent known for use in cancer therapy or for treatment of immune diseases characterized by hypoactive or hyperactive immune 15 system dysfunction, and a pharmaceutically acceptable carrier therefor.
29. A method of activating the B-cell population of a patient suffering from a disease state characterized by attenuated B-cell function said method comprising the steps of administering orally or parenterally to said patient about 0.1 to about 10,000 IU of IFN-gamma/kg of body weight of said vertebrate and activating at 20 least a portion of said B-cell population.
30. The method of claim 29 wherein the IFN-gamma is administered into the oral cavity.
31. The method of claim 30 wherein the IFN-gamma is administered sublingually or buccally.
- 25 32. The method of claim 29 wherein the IFN-gamma is administered in a liquid dosage form.
33. The method of claim 29 wherein the IFN-gamma is administered in a solid dosage form.
34. The method of claim 33 wherein the solid dosage form is saliva- 30 soluble and is in lozenge dosage form.

35. The method of claim 29 wherein the interferon-gamma is administered at about 0.1 to about 5000 IU of interferon-gamma/kg of body weight of said vertebrate.

36. The method of claim 29 wherein the interferon-gamma is administered  
5 at about 1 to about 500 IU of interferon-gamma/kg of body weight of said vertebrate.

37. The method of claim 29 wherein the interferon-gamma is administered at about 1 to about 100 IU of interferon-gamma/kg of body weight of said vertebrate.

38. A method for treating or preventing bacterial or fungal disease in a warm-blooded vertebrate susceptible to said diseases, the method comprising the  
10 steps of administering orally or parenterally to said vertebrate about 0.1 to about 10,000 IU of IFN-gamma/kg of body weight of said vertebrate and a therapeutic agent selected from the group consisting of an antibiotic and an antifungal, and treating or preventing said bacterial or fungal disease.

39. A method for treating or preventing IFN-gamma sensitive disease  
15 states selected from the group consisting of diseases characterized by monocyte and neutrophil dysfunction, cancer and fibrosis in a human patient suffering from such disease, said method comprising the steps of administering orally or parenterally to said patient about 0.1 to about 10,000 IU of IFN-gamma/kg of body weight of said vertebrate and a therapeutic agent selected from the group consisting of an antifibrotic  
20 and a chemotherapeutic agent known for use in cancer therapy or for treatment of immune diseases characterized by hypoactive or hyperactive immune system dysfunction, and treating or preventing said disease states.

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